Amendments to the Specification

Please replace paragraph [0023] with the following paragraph:

[0023] FIG. 5 is a schematic drawing of the chemical structure of the peptide-amphiphile $C_{15}H_{31}C(O)$-CCCCRFEFRFEFR-NH_2 illustrating the important groups of the molecule as well as a representation of the magnitude and direction of two of the amphiphilic moments in the molecule. For illustrative purposes, Region 1 may be an alkyl group that is covalently bonded to Region 2, which may be divided further into sections 2A and 2B. Regions 1 and 2 together define a first amphiphilic moment of the molecule. The molecule may further comprise a second amphiphilic moment defined by Regions 2A and 2B, wherein Region 2B comprises the polar and non-polar amino acids labeled 3, 4, 5 and 6.

Please replace paragraph [0051] with the following paragraph:

[0051] The self assembly and gelation of peptide-amphiphiles like Molecule 1 ~~Molecule1~~ and Molecule 2 to form the supramolecular composition is triggered by addition of monovalent cations into the peptide-amphiphile solution. The monovalent salts provide an ionic environment that is believed to reduce the electrostatic repulsive force between peptideamphiphiles of the same polarity. Examples of suitable monovalent cations include but are not limited to Na^+, K^+, or RNH_3^+. The monovalent cations in solution enable the peptideamphiphiles to establish short range hydrophobic interactions between the aliphatic tails of the molecules as well as the amphiphilic portions of the peptide sequence. Amphiphilic peptides were previously reported to self assemble into β-sheet based supramolecular structures (Aggeli et. al. 1977, and Holmes et al., 2000).

Please replace paragraph [0068] with the following paragraph:

[0068] Chemicals: Except as noted below, all chemicals were purchased from Fisher or Aldrich and used as provided. Amino acid derivatives were purchased from Applied BioSystems and NovaBiochem; derivatized resins and O-Benzotriazole-N,N,N',N'-tetramethyl-uronium-hexafluoro-phosphate (HBTU) were also purchased from NovaBiochem. All water used was deionized with a Millipore Milli-Q water purifier operating at a resistance of 18 MW.

Please replace paragraph [0069] with the following paragraph

[0069] Synthesis of the peptide-amphiphiles: The peptide-amphiphiles were prepared on a 0.25 mmole scale using standard FMOC chemistry on an Applied Biosystems 733A automated peptide synthesizer. After the peptide portion of the molecules was prepared, the resin was removed from the automated synthesizer and the N-terminus capped with a fatty acid containing 16 carbon atoms. The alkylation reaction was accomplished using 2 equivalents of the fatty acid, 2 equivalents HBTU and 6 equivalents of n,n-diisopropylethylamine (DiEA) in dimethylformamide (DMF). The reaction was allowed to proceed for at least six hours after which the reaction was monitored by ninhydrin. The alkylation reaction was repeated until the ninhydrin test was negative. Only two couplings were required in each case.

Please replace paragraph [0070] with the following paragraph:

[0070] Cleavage and deprotection of the molecules was accomplished with a mixture of trifluoroacetic acid (TFA) and triisopropylsilane (TIS) in a ratio of 95:5 for three hours at room temperature. The cleavage mixture and two subsequent TFA washings were filtered into a round bottom flask. The solution was roto-evaporated to a thick viscous solution. This solution was triturated with cold diethylether. The white precipitate was collected by filtration, washed with copious cold ether and dried under vacuum. The molecules were then dissolved in water at a concentration of 10 mg/mL, adjusting the pH to improve solubility. The solution was initially acidic in both cases. In the case of molecule 1, the pH was raised to about pH 8 with 2M and

100 nM KOH, then back-titrated to pH 7. In the case of molecule 2, the molecule was most soluble at low pH, but remained in solution when the pH was raised to 7 using KOH. The molecules were characterized by ESI MS and were found to have the expected molecular weight